

ABSTRACT

An assay article for detection biopolymers contained in a sample is described. The assay article includes a substrate and a biopolymer directly adsorbed on the surface of the substrate. A plurality of biopolymers may be adsorbed on the surface of the substrate to form an array. Also disclosed is a method of making the assay article. In the preferred method, an aminated polypropylene substrate is used. A biopolymer is contacted with the aminated substrate under a condition sufficient for direct adsorption of the biopolymer on the surface of the substrate. A method of detecting a target biopolymer contained in a sample is also disclosed. In this method, a substrate is contacted with either a probe or target biopolymer under a condition sufficient for a direct adsorption of either the probe or target biopolymer on the substrate to form a probe assay article or a target assay article. Then, the probe assay article is contacted with the target biopolymer, or the target assay article is contacted with the probe biopolymer under a condition that allows the formation of a probe-target complex. Finally, the complex is detected and the presence of the complex is used as a measurement for the presence or the amount of the biopolymer target contained in the sample.